Sector 19

Structural Biology Center

Structural Biology Center CAT

Overview

The Structural Biology Center CAT has constructed a national user facility at the APS for studies in macromolecular crystallography. Funded by the Department of Energy's Office of Biological and Environmental Research, the Structural Biology Center provides users with a full complement of instrumentation, ancillary facilities, software, and support staff to enhance the productivity of their research. The majority of beam time is allocated to Independent Investigators through a proposal process, with a small amount of time reserved for research and development activities by SBC-CAT staff members.

Research Focus

The principal focus of the SBC-CAT research program is macromolecular crystallography. Designed as a rapid-throughput facility, the Structural Biology Center provides researchers with the ability to use both standard crystallographic techniques and multiple energy anomalous dispersion (MAD) phasing methods.

One current major program focuses on the study of macromolecular assemblies, with an emphasis on molecular recognition and interaction between macromolecules. Specific projects include molecular chaperones (bacterial and archael chaperonins 60, human hsc70 chaperone), protein/nucleic acid complexes (trp repressor/operator systems), and multimeric enzymes.

CAT contacts:	Andrzej Joachimiak, *CAT Director*	tel 630.252.3926	andrzejj@anl.gov
	WWW Site		http://www.sbc.anl.gov
Beamline contacts:	Randy Alkire, *(19-BM & -ID)*	tel 630.252.3865	alkire@anl.gov
	Stephan Ginell, *(19-BM & -ID)*	tel 630.252.3972	ginell@anl.gov
	Andrzej Joachimiak, *(19-BM & -ID)*	tel 630.252.3926	andrzejj@anl.gov